

REMARKS

Review and reconsideration of the subject application in view of the present amendment is respectfully requested.

Claims 1-14 and 16-18 are currently pending in the application.

Claim 15 is cancelled without prejudice and disclaimer.

Claims 1 and 18 have been amended to clarify features of the present invention. Claim 16 has been amended to correct a typographical error.

Accordingly, applicant believes that amended claims 1, 16, and 18 obviate the need for further rejection.

The specification was objected to by the Examiner under 35 U.S.C. 112, first paragraph. Accordingly, the specification has been revised in order to comply with 35 U.S.C. 112, first paragraph, and is in condition for allowance.

The previous claims were rejected variously under 35 U.S.C. 112, second paragraph. Thus, claims 1 and 18 have been amended in order to comply with 35 U.S.C. 112, second paragraph. Applicant notes that a mechanism, as stated in the Summary of the Invention, is one example of an organ as stated in claim 1. Further, applicant notes that a number within parentheses is not a limitation in a claim. Accordingly, amended claims 1 and 18 obviate the need for further rejection.

Claims 1-18 were rejected over U.S. Pat. No. 5,526,989 to Stapes *et al.* in view of U.S. Pat. No. 5,223,280 to Ogata *et al.* Respectfully, applicant traverses the rejection. Amended claim 1 states, in pertinent part, "at least three guide cables (11)... converging towards a guide means (13) to which they are hooked at hooking

points." Thus, all of the guide cables are engaged to the guide means, and remained engaged to the guide means regardless of the location accessed within the silo. Thus, no manual effort is required by a user to connect or disconnect any cables to the guide means. Therefore, a user is not required to penetrate the silo under normal operations. Staples does not disclose such structure.

Conversely, Staples discloses only selective connection, through an access opening (24), of the control lines (34) to the cleaning device (16) that is dependent upon the location accessed within the silo. Indeed, the reference provides that in a preferred embodiment, a "forwarding device" is used to manually feed the control lines within the tank to the cleaning device or the storage hooks. (see col. 5, lines 26-39) Further, the reference provides for storage of the unused control lines. It states, in pertinent part, "hooks (46)... are preferably provided... for enabling the control lines (34) to be connected thereto for later use *when not connected to the cleaning device (16).*" (emphasis added) (see col. 4, lines 51-55). Thus, such a design would be detrimental to the user when the contents of the silo are hazardous and manual operations through the upper opening must be avoided to the utmost. For example, the series of manual operations required by the Staples reference before the organ is completely guided within the silo would be too lengthy and hazardous in the nuclear industry.

Moreover, the reference states, "by connecting two adjacent control lines (34) to the cleaning unit (16)... the cleaning unit (16) can be moved to any location *within the 'pie slide'-shaped area defined by the two control lines.*" (emphasis added)(see

col. 4, line 64 through col. 5, line 1) Thus, the user is required to selectively connect the control lines (34) to the cleaning device (16) depending upon the specific section accessed within the silo. Again, this series of steps through an access opening (24) would be too lengthy and hazardous in the nuclear industry. Accordingly, it is respectfully submitted that claims 1-14 and 16-18 are allowable.

Additionally, amended claim 1 states, in pertinent part, "a common control system for the winches (10, 9)." Thus, the common control system comprises a computer linked to the motors and control sensors of the guide winches (10) and the lifting winch (9). The control system makes it possible to move the guide means (13) within the silo at will, while monitoring the system for possible problems and correcting as necessary. None of the prior art references disclose this.

Accordingly, it is respectfully submitted that claims 1-14 and 16-18 are allowable.

Further, amended claim 1 states, in pertinent part, "the guide means being provided at a periphery thereof with sliding surfaces (65) for the support cable which alternate with the holing points (60) of the guide cables (11), the surfaces (65) of the guide means being concave when linking the hooking points (60) of the guide cables." Thus, the present invention includes a star-shaped guide means having outer concave surfaces that catch the support cable of the organ when the guide means is displaced within the silo. The outer concave surfaces provide an accurate horizontal position to the organ, while allowing a complete separation thereof when the work is done. None of the prior art references disclose this. Conversely, the Staples reference utilizes the lifting winch (28) to cause the cleaning unit (16) to

Appl. No. 09/623,604
Amdt. Dated July 29, 2004
Reply to Office action of March 8, 2004

move across the tank instead of the guide winch assemblies. (see col. 7, lines 41-52) Accordingly, it is respectfully submitted that claims 1-14 and 16-18 are allowable.

Further, applicant believes that it would not have been obvious to a person having ordinary skill in the art to provide the cleaning device (16) of the Staples reference with the grasping means (63, 64) of the Ogata reference. The Staples reference details a method "designed to aid in the removal of sludge (14) from the bottom of a tank." (see col. 3, lines 41-44) The Ogata reference details "an apparatus for taking residual solid matter out of an extrusion head of an extruder." (see Abstract) A person of ordinary skill in the art of removing sludge from the bottom of a tank would not be motivated to look to references detailing extrusion heads in the tire industry. Accordingly, it is respectfully submitted that claims 1-14 and 16-18 are allowable.

It is believed no additional fees are required for this amendment. However, if any additional fees are due, please charge same to Deposit Account No. 16-0820, our Order No. 32910.

Respectfully submitted,

PEARNE & GORDON LLP

By: 
Ronald M. Kachmarik, Reg. No. 34512

1801 East 9th Street, Suite 1200
Cleveland, Ohio 44114-3108
(216) 579-1700
Date: July 29, 2004